

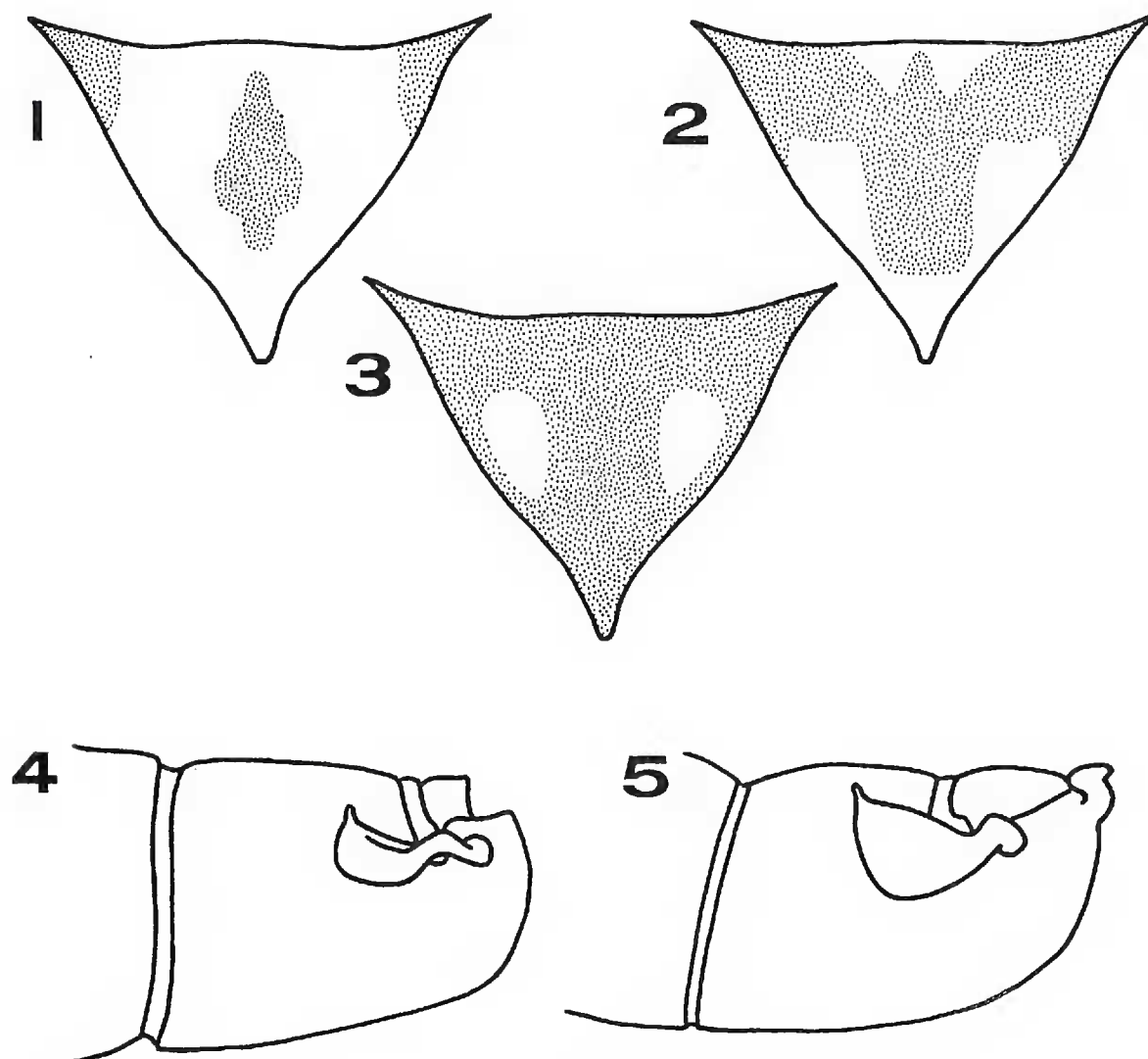
It is interesting that the eastern genus of pitcher-plant, *Sarracenia*, has many recorded dipterous associates, while *Darlingtonia* has but three. It is also interesting that no mosquito larvae were found in any of the plants, since they are recorded from *Sarracenia*. This study was supported in part by the NIH Training Grant, Department of Entomological Sciences, University of California, Berkeley.—S. L. SZERLIP, *Division of Entomology and Parasitology, University of California, Berkeley, 94720.*

Identification of the damsel bugs, *Nabis alternatus* Parshley and *N. americanoferus* Carayon (Heteroptera: Nabidae).—Harris (1928, Entomol. Am. 9: 1-97) records 6 species of Nabidae from California; 3 of these are extremely rare, and known from only a few specimens. Harris stated that of the 3 common species, *N. ferus* (L.) was European in origin and had been introduced and became widely distributed in the U.S. while *Pagasa fusca* (Stein) and *Nabis alternatus* Parshley were native. However, extensive genitalic studies of North American and European specimens of "*N. ferus*" (Carayon, 1961, Bull. Mus. Nat'l. Hist. Nat. Paris (2) 33: 183-96) have shown the American form, now *N. americanoferus* Carayon, to be distinct from *N. ferus*, which is now thought not to occur in California.

Development of a couplet to separate the two species of *Nabis* resulted from difficulties encountered in rapidly identifying California Nabidae during studies on predatory Hemiptera in Sacramento Valley alfalfa hay fields. Identification using Harris's monograph or the keys of Werner and Butler (1957, Ariz. Agr. Exp. Sta. Tech. Bull. 133: 1-12) proved impractical due to the very similar overall appearance and variable color patterns in our 2 common species of *Nabis*. Also, we would point out that keys and descriptions of "*N. ferus*" in both taxonomic works apply to *N. americanoferus* and not to the true European *N. ferus*. The following couplet was constructed using specimens of Nabidae subsampled from the predation study and identified by experienced Hemipterists. Its accuracy was then confirmed by testing it on identified museum specimens from a wide geographic range. The color pattern of the scutellum is best observed when the specimen is in alcohol. All characters used in the couplet refer to both sexes unless otherwise indicated.

Couplet to separate *Nabis alternatus* and *Nabis americanoferus*.

- Scutellum dark brown with a pale yellow "V" shaped area extending to the posterior margin (Fig. 2) or scutellum yellow except for brownish areas centrally and at the anterior lateral margins (Fig. 1); male clasper (Fig. 5) wide (0.20-0.28 mm) and long (0.52-0.60 mm); body length 7.0-9 mm *N. americanoferus* Carayon
- Scutellum dark brown with two oval yellowish areas, each located mid-laterally (Fig. 3); male clasper (Fig. 4) narrow (0.11-0.16 mm) and short (0.40-0.44 mm); body length 6.4-8.1 mm *Nabis alternatus* Parshley



FIGS. 1-5. Structures used in separating species of *Nabis*; 1-3, scutellum; 4-5, lateral view of male genitalia, showing claspers. Figs. 1, 2, 5, *N. americanoferus*. Figs. 3, 4, *N. alternatus*.

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